Union Bounds On The Bit Error Probability Of Coded MRC In Nakagami-M Fading

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Summary

In this letter new union bounds are derived for coded maximal ratio combining (MRC) over Nakagami-m fading channels. The union bounds are expressed in the product form, which makes them easily, evaluated using the transfer function of the code. The bounds are general to any diversity order and coding scheme with a known transfer function. Results show that the new bounds are tight to simulation results for wide ranges of diversity orders and Nakagami parameters